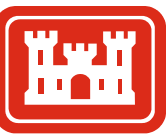


# ***Points and Pathways of Exposure***

## **Current Focus**

- Release of perchlorate from vegetation***
- Transformation of perchlorate in vegetation***
- Market basket-type survey***

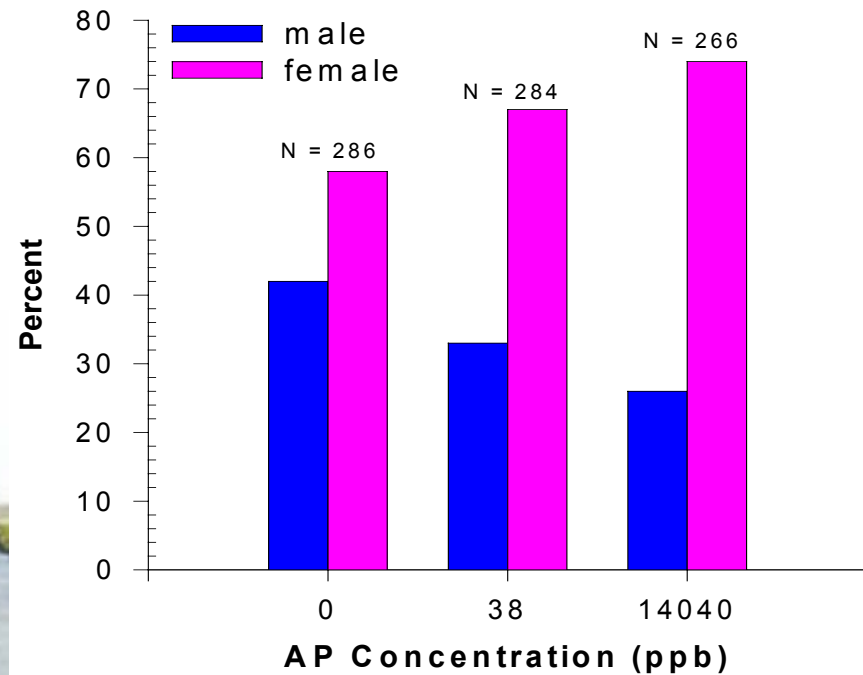
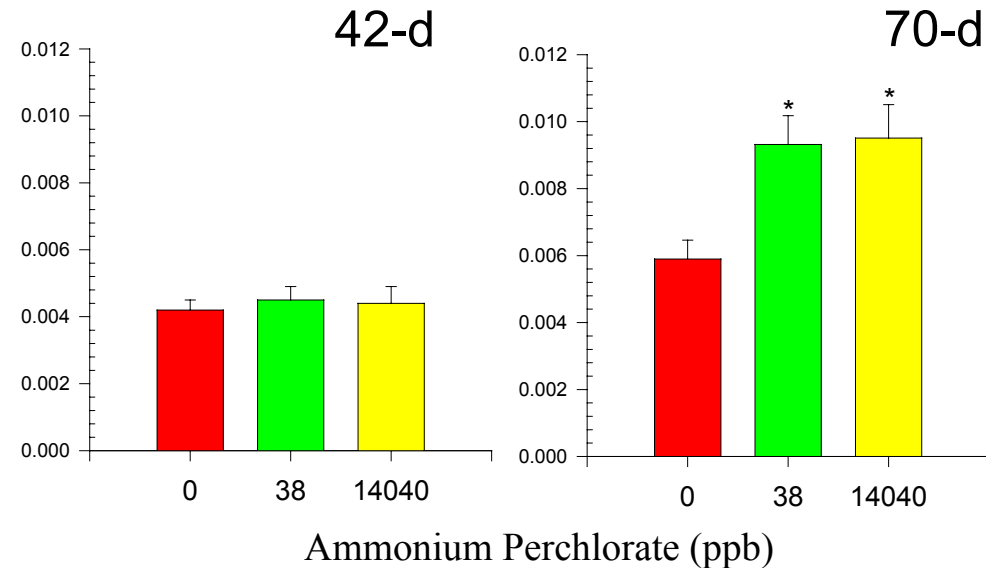


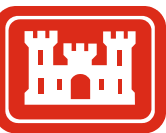


# ***Impacts on Fish and Amphibians***

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- **Frogs and Fish**
  - *thyroid histology*
- **Frogs**
  - *male offspring*
- **Frogs**
  - *effects are reversible*

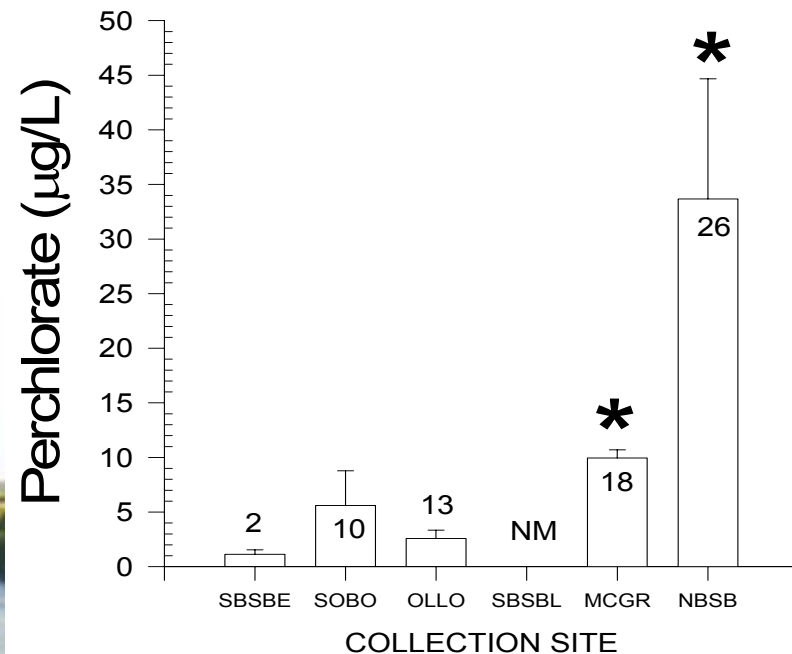
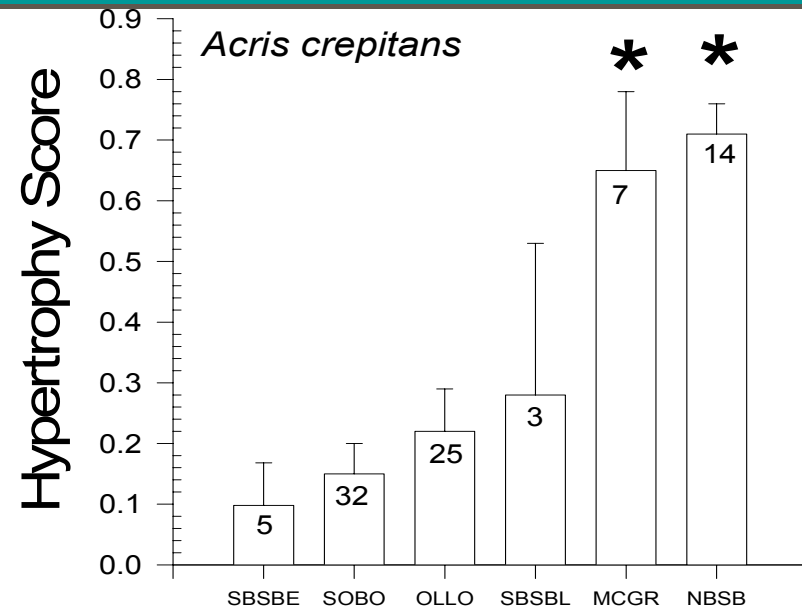




# Impacts on Fish and Amphibians

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- Native Frogs and Fish
  - thyroid histology*



# ***Impacts on Fish and Amphibians***

## **Current Focus**

- ***Continue thyroid histopathological assessment***
- ***Frog development in water from study area***
- ***Perchlorate in edible fish tissues***



# ***Impacts on Mammals and Birds***

- **Small Mammals**
  - *significant exposure risk*
- **Small Birds**
  - *perchlorate is present*
- **Tissue Distribution**
  - *no definite pattern*





# ***Impacts on Mammals and Birds***

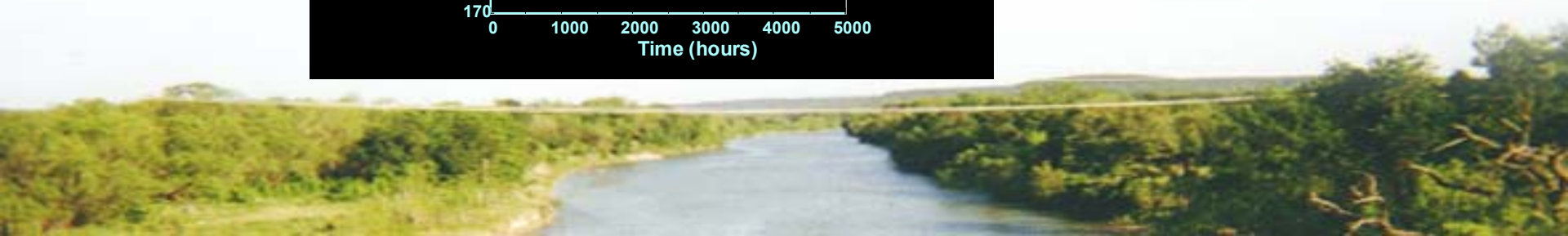
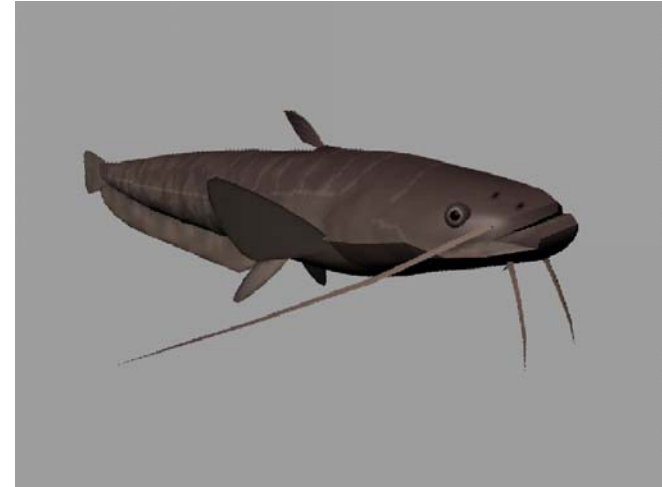
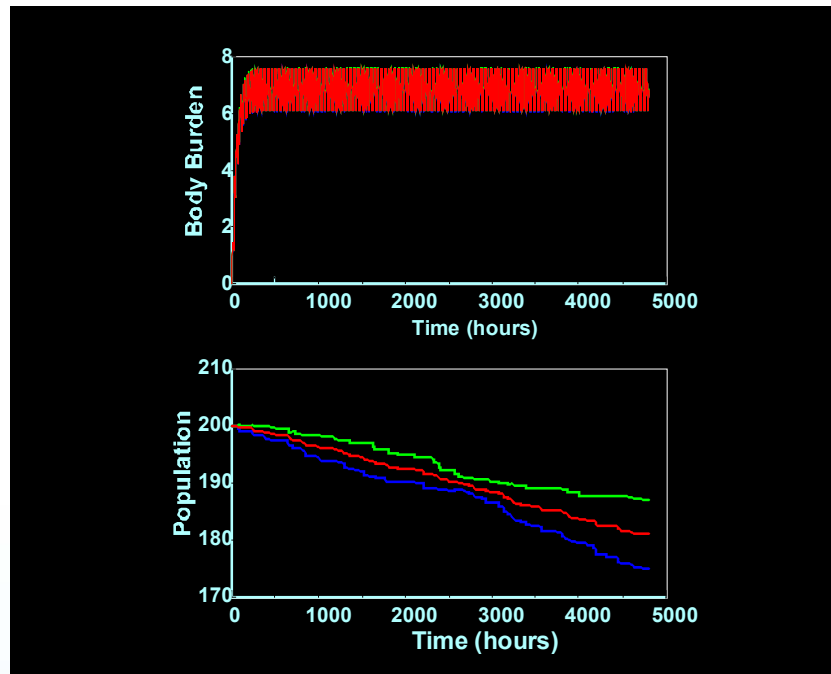
## **Current Focus**

- ***Perchlorate assessment in large mammals (cows)***
- ***Laboratory tissue distribution studies***
- ***Potential impacts on thermal regulation***



# ***Model Long-Term Exposure and Effects***

- **Exposure and Effects Simulations**



# ***Model Long-Term Exposure and Effects***

## **Current Focus**

- Model refinement using collected data***







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# ***Watershed Studies***

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